#### NOTE I.

#### ON EXOTIC DIPTERA.

BY

### F. M. van der WULP.

PART 1.

(Concluded from vol. VI, page 256).

#### 11. Ctenophora annulosa, n. sp.

Atra velutina; abdomine annulo basali aurantiaco; antennis, palpis, pedibus halteribusque nigris; alis fuscis, maculis sublimpides in cellularum medio. -- Q. Long. 20,5 mm.

Closely related to the two foregoing species; the thorax, however, is entirely black; on the contrary the posterior half of the first abdominal segment and the anterior half of the second one are orange. The wings are not so broad and less dark; all the cells, except the costal ones, have clear centres; neuration agreeing with that of incurctans and velutina.

A \$\text{Q}\$ from Java (Blume).

Prionota, n. g.

( $\pi\rho\iota o\nu o\tau o\varsigma$ , serrulated).

G. Ctenophorae affinis, sed antennae in utroque sexu forte nodulosae vel serratae, in mare non ramulosae.

In the robust stature, the shape of the head, the long flexible terminal joint of the palpi and the neuration of the wings this new genus agrees with *Ctenophora*, but it may be distinguished by the antennae, which in both sexes are strongly enlarged on one side and somewhat sawlike.

Face conically prolonged downwards and extended to a sharp point; eyes round, slightly prominent. Antennae stout, composed of thirteen joints, with exserted hairs; the two basal joints as in *Ctenophora*; the third and following ones slender at the base, and enlarged into a broad knob towards the underside, in consequence of which the antennae have a sawlike appearance; the apical joint subulate. Palpi four-jointed; the terminal joint as long as the three preceding taken together. Thorax convex; pronotum distinctly separated. Abdomen oblong, composed of eight segments; genitals of the male but little swollen. Legs stout; tibiae, at least the hind ones, with short spurs. Wings as long as the abdomen; the second posterior cell sessile.

### 12. Prionota nigriceps, n. sp.

Ferruginea opaca; capite, antennarum nodulis, palpis, abdominis segmentis ultimis (in  $\circlearrowleft$ ), femorum tibiarumque apice nigris; tarsis fuscis; alis infuscatis. —  $\circlearrowleft$ . Long. 16 mm.,  $\circlearrowleft$  mare major.

Head, including the palpi, black or blackish-brown. Antennae of the \$\sigma\$ at least as long as the head and thorax together; those of the \$\sigma\$ hardly half as long; the two basal joints and the short stem of the following joints reddish-yellow; the broad knob of the latter black; the exserted hairs yellow. Thorax and scutellum ferruginous, opaque, with short pilosity of the same colour; pleurae darker, especially in the \$\sigma\$. Abdomen of the \$\sigma\$ reddish-yellow on the three first segments; the following ones and the genitals black; first segment short; second very long, with a narrow black lateral stripe; the following segments gradually decreasing in length (in the female

specimen the abdomen is broken off). Legs reddish-yellow; the tips of the femora black; tibiae infuscated towards the end; tarsi fuscous. Halteres reddish-yellow with their knob brown. Wings with a brown tinge and still darker stigma; the centre of most of the cells lighter.

A pair from Java (Kuhl).

### 13. Megistocera fuscana, Wied.

Nematocera fuscana, Wied. Dipt. ex. I. 29; — Megistocera fuscana, Wied. Auss. Zweifl. I. 55. 1; Macq. Suit. à Buffon, Dipt. I. 114. 2. pl. 2, f. 15; id. Dipt. ex. Supp. 1. 18. 2. pl. 2, f. 4.

In the Leyden Museum are two specimens, one from Java (Macklot), the other from Halmaheira (Bernstein), which I consider to belong to this species, though the description of Wiedemann does not agree in all points. The colour, which he calls »gemsleder-bräunlich", in these specimens is rather pale ferruginous, the brown longitudinal stripes on the thorax, mentioned by him, are only faintly indicated.

Macquart has already remarked that Wiedemann was mistaken in considering his specimen, which had exceedingly long antennae, a female, for, in the genus Megistocera this is exclusively a character of the male. The two above mentioned specimens of the Leyden Museum are also males; in the one from Java the antennae are present, but the abdomen is broken off; in the one from Halmaheira the contrary is the case. It will be easily understood, that insects of such tender structure do not often reach us in good condition.

The first joint of the antennae is cylindrical, very thick and as long as the face; the second joint is short and knotty; then follows an extremely long, hairlike flagellum, the three or four first joints of which only are set off by a rather inconspicuous knot. The head and thorax have a dense and rather long pilosity. The abdomen is

proportionately very short. The wings pure hyaline, even along the costa, and more than twice as long as the abdomen; the veins and the very distinct stigma are testaceous. The neuration agrees chiefly with that of *Tipula* and *Ctenophora*; the upper basal cell is longer than the two others; the middle basal cell does not quite reach the discal cell, but is separated from it by a small pedicle; the two subcostal cells are large, the inner one somewhat triangular, the cubital cell is also broad, especially at its base; the discal cell on the contrary is very small, trapezoïdal; the first posterior cell is narrow in the middle, in consequence of a sinuosity of the longitudinal veins which limit it; the axillar vein is very short 1).

## 14. Tipula umbrina, Wied.

T. umbrina, Wied. Auss. Zweifl. I. 49. 14; v. d. Wulp, Tijdschr. v. Entom. XXIII. 158. 4; — T. castanea, Macq. Dipt. ex. I. 1. 54. 4; — T. congruens, Walk. Proc. Linn. Soc. Lond. V. 231. 8.

This species seems to be very common in the Sunda Islands for it occurs in almost every collection, containing Tipulidae, received from there. Besides the many Javanese specimens, existing in the Leyden Museum or in my possession, I have seen specimens of it from Sumatra (v. Lansberge), from Gorontalo (v. Rosenberg) and from Obi (Bernstein).

Most of the specimens, which I examined, exactly agree with the description of *T. castanea* Macq., which must be considered merely as a variety of *T. umbrina*. The antennae are just as Macquart describes them. According to him, the difference principally exists in the absence of the brown stripe on the metanotum and of the white transverse band on the wings. In fact there are only a

With regard to the nomenclature of the neuration see "Tijdschrift voor Entomologie" XIV. p. 97.

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few specimens, which show the brown stripe of the metanotum; on the contrary the white band of the wings is always more or less distinct.

### 15. Tipula serrata, n. sp.

Testacea; thoracis dorso abdominisque segmentis ultimis, praeter genitalia, fuscis; antennis nudis, ochraceis, serratis; alis laete infuscatis, basi striga nigra. — & Long. 22 mm.

Testaceous. Antennae ochraceous, as long as the head, without bristles; joint 4—11 dilated towards the underside, which gives a serrulated appearance to the antennae; the two last joints slender. Thorax on the upper part dark bronze, which colour ends near the front margin in three indistinct longitudinal stripes; the thorax has a short pale yellow pilosity. The last segments of the abdomen are fuscous; the genitals testaceous, not very large. Legs reddish-yellow; the tips of the femora and tibiae, as well as the whole of the tarsi fuscous. Halteres brown with the stem clearer. Wings much longer than the abdomen, uniformly greyish-brown, the stigma a little darker; base of the subcostal vein thick and blackish; discal cell pentagonal; fureated cell shortly pedunculate.

A of from Serahan (Felder).

A Q from Sumatra (v. Lansberge) seems to belong to the same species, but is in too bad condition for certain identification.

### 16. Tipula pilosula, n. sp.

Testacea; thorace pilosulo; antennis simplicibus, nudis, cylindricis; alis cinereis. — &. Long. 16 mm.

Testaceous. Head with the two basal joints of the antennae bright ochraceous; the following joints pale brown; the antennae are simple, hardly as long as the head and without bristles. Palpi pale brown. Thorax with ill-defined brown longitudinal bands, the whole surface with rather

long dense projecting, pale yellow hairs. Abdomen somewhat darkened on the last segments; genitals not very large, with a pair of short, pointed nipples on the upper side. Legs very long and slender, uniformly pale brown. Halteres yellow with the knob black. Wings with a cinereous tinge; the stigma pale brown.

A of from Ambarawa in Java (Ludeking).

## 17. Tipula leucopyga, n. sp.

Dilute testacea; thorace dorso vittis latis subcohaerentibus fuscis; abdomine vitta laterali segmentisque 5, 6 et 7 supra nigricantibus; segmento ultimo pallido; antennis subsimplicibus, articulis duobus primis subrufis, reliquis cinereis basi nigra; alis laete cinereis, cellula costali et stigmate testaceis. — Long. 11,5 mm.  $(\triangleleft)$ , 13 mm.  $(\triangleleft)$ .

This species resembles our *T. oleracea*, but is much smaller; the costa of the wings is less dark and not accompanied by a light border.

Head testaceous; on the vertex a brown spot; face but little prolonged. Antennae a little longer than the head; the two basal joints subrufous; the following joints cinereous, oblong, with an insignificant swelling at the base and the tip; their base black with a pair of long exserted hairs. Palpi testaceous, brown towards the end. Thorax pale yellowish-brown, on the upper side with three broad, almost wholly connected, brownish longitudinal bands; the outward ones shortened in front; the middle one divided by a dark longitudinal line. Abdomen of the male pale testaceous; a lateral band and the upper side of the 5th, 6th and 7th segments blackish; the last segment vellowish-white, on the upper side terminated by a pair of small black hooks; abdomen of the female generally a little darker; the last segment pale rufous; ovipositor shining ferruginous. Legs pale brown; the tips of the femora and tibiae, as well as the whole of the tarsi fuscous. Halteres fuscous, with the base of the stem pale

yellow. Wings longer than the abdomen, cinereous; the costal cell and the stigma testaceous; discal cell pentagonal; furcated cell about thrice as long as its stalk; the third posterior cell narrow-, the fourth one on the contrary enlarged at the end.

A single but well preserved pair from Ambarawa in Java (Ludeking).

### 18. Tipula tenuis, n. sp.

Cinerea; abdomine utrinque vitta laterali interrupta nigra; pleuris et ventre pallidis; antennis gracilibus, articulis duobus primis luteis, reliquis nigris; palpis fuscis; pedibus tenuibus testaceis; alis subhyalinis, stigmate testaceo. — Q. Long. 13,5 mm.

Antennae slender; the two basal joints pale yellow; the third and following joints black, cylindrical, bare (the last joints are absent in both specimens). Head testaceous; orbits of the eyes whitish; palpi fuscous. Thorax on the upper side cinereous with hardly any indication of longitudinal stripes; pleurae light grey. Abdomen testaceous, with a black lateral stripe which is interrupted and bordered with pale yellow; underside and ovipositor yellowish; the tip of the latter chestnut-coloured, shining. Legs very long and slender, uniformly testaceous; the tarsi infuscated. Halteres fuscous. Wings longer than the abdomen, hyaline with hardly any cinereous tinge and a rather clearly defined testaceous stigma, which does not quite reach the margin of the wing; the neuration calls to mind that of the genus Megistocera; the two submarginal cells are large, the inner one triangular; discal cell pentagonal; furcated cell shortly pedunculated; axillar vein unusually short.

Two female specimens from Surinam, presented to the Museum by Mr. Horst.

### 19. Pachyrhina maderensis, n. sp.

Flava; thorace vittis tribus fuscis, media gemina, lateribus antice rectis; pleuris immaculatis; metanoto maculis tribus fuscis; abdominis segmentorum singulorum margine postico nigro; antennarum flagello nigro, articulis subcylindricis; alis flavo-cinereis, stigmate testaceo. — 3. Long. 9 mm.

Reddish-yellow. Face shining; a point on the vertex black. Antennae as long as the head and thorax together; the two basal joints yellow; the following joints blackish, cylindrical, at the base scarcely swollen and with a short hair. Palpi yellowish-brown. The bands of the thorax brown, the middle one before the suture divided in two; the outward ones not laterally curved in front; metanotum with three brown spots close together; pleurae unspotted. The abdominal segments with a black hind border, which is broader in the middle; the clubshaped anus reddish-yellow. Coxae and femora yellow; the latter with a dark brown tip; tibiae and tarsi yellowish-brown. Halteres yellow with a dark knob. Wings with a greyish-yellow tinge and the stigma testaceous; discal cell quadrangular; furcated cell sessile.

A of from Madera (Kuhl).

### 20. Pachyrhina nigro-annulata, n. sp.

Fulva; pronoto, thoracis disco, abdomine fasciis segmentisque ultimis iotis nigris; antennis dilute fuscis; pedibus flavis, femorum et tibiarum apice tarsisque fuscis; alis brunnescentibus, stigmate fusco. — Long. 15,5 mm. ( $\circlearrowleft$ ), 18 mm. ( $\circlearrowleft$ ).

General habit like our European P. crocata. Orange-yellow. Antennae of the  $\sigma$  as long as head and thorax together; the first joint yellow, the following ones testaceous or pale brown; joint 4, 5 and 6 somewhat notched on the underside, fuscous on the base; antennae of the  $\varphi$  shorter, the joints not notched. Front a little prominent;

face but little prolonged, with a tuft of black hairs on the nose; palpi yellow, darker towards the end. Collar black; on the thorax three broad, shining black, longitudinal bands, which are connected in the middle; the middle band not crossing the suture; the outward ones shortened in front and prolonged behind as far as the scutellum, which is also black; pleurae with a broad, oblique, black band, reaching to the middle coxae; metanotum black below. Abdomen slender at the base, a little enlarged towards the end; hindborder of the five first segments and the following segments entirely black; the Q with the ovipositor as well as the small foregoing segment ferruginous. Legs yellow; the tip of the femora and tibiae, as well as the tarsi dark brown. Halteres yellow, the tip of the knob blackish. Wings with a brownish tinge; veins black; stigma fuscous; furcated cell sessile (in one of the female specimens shortly pedunculate).

A male and two female specimens from Morotai (Bernstein).

This species seems to be related to *P. laconica* and *ortiva* Ost. Sack. (Berl. ent. Zeitschr. XXVI. p. 92 and 93); it differs however in having the black markings less extended, especially on the abdomen, and from *laconica* by the yellow metanotum, which has only a black spot on the underside, and by the yellow coxae; from *ortiva* in having the black spot on the front absent.

## 21. Pachyrhina quadrivittata, n. sp.

Flava; thorace vittis quatuor, metanoto macula quadrata et abdomine maculis dorsalibus trigonis nigris; antennarum flagello fusco, articulis reniformibus; alis cinerascentibus, versus apicem obscurioribus; stigmate dilute fusco. — J. Long. 12,5 mm.

Reddish-yellow. Vertex with a black trigonal spot, which is prolonged into a point in front. Antennae as long as head and thorax together; the two basal joints yellow; the following

joints fuscous, thickened at the base and provided with rather long hairs, narrow in the middle, then thickened again. Rostrum and palpi yellow. Thorax with four black longitudinal bands, which are united in front by a black border; the two lateral bands surround the shoulderknots: scutellum with a black longitudinal band; metanotum with a large quadrangular black spot; pleurae unspotted. The black markings of the abdomen consist of a transverse band on the first segment, a round spot on the second, the third and following segments with trigonal spots, which have the tips directed forwards; the last segments are almost entirely black; the genitals reddish-yellow, on the upper part with a pair of hooks, which are curved towards each other. Legs yellow; tips of the femora black; tibiae and tarsi testaceous. Halteres vellow; the knob, except its tip, blackish. Wings yellowish-cinereous, darker towards the end; stigma pale brown, preceded by a smaller spot of the same colour above the point where the radial vein issues from the cubcostal vein; furcated cell very shortly pedunculate; discal cell quadrangular.

A of from Java (Kuhl).

# 22. Pachyrhina triplasia, n. sp.

Flava; thorace vittis tribus latis nigris, lateribus antice recurvatis; pleuris immaculatis; abdomine vittis tribus nigris, dorsali latiori, interrupta; antennarum flagello nigro, verticillato, articulis reniformibus; alis cinerascentibus, stigmate dilute fusco. — Long. 10 mm. ( $\sigma$ ), 13 mm. ( $\varphi$ ).

Reddish-yellow. A spot on the nose and another behind each of the eyes, black; the former in the Q indistinct. Antennae of the  $\circlearrowleft$  as long as head and thorax together, those of the Q shorter; the two basal joints yellow; the following ones black, dilated at the base and at the end, with exserted hairs. Palpi testaceous, the terminal joint black. Thorax with three broad, black, longitudinal bands, the middle one enlarged in front and reaching the col-

lar; the lateral ones bent outwards in front; pleurae unspotted; metanotum with some indistinct brown spots. Abdomen with three black longitudinal stripes, that on the back broader, but interrupted at the incisions, male genitals provided with knots, pilose, chestnut-coloured, with a pair of pointed nipples; ovipositor of the female shining rufous. Legs testaceous; femora darker towards the end. Halteres yellow; the knob partly blackish. Wings grey; the stigma pale brown.

A single pair from Ambarawa in Java (Ludeking).

#### 23. Eriocera acrostacta, Wied.

Limnobia acrostacta, Wied. Dipt. ex. I. 14. 4; id. Auss. Zweifl. I. 26. 4; Macq. Dipt. ex. Supp. 1. 18. 9; pl. 2, f. 6; — Cylindrotoma acrostacta, Macq. Dipt. ex. I. 168. 2 pl. 9, f. 7; id. Supp. 3. 7; — Oligoneura javensis, Dol. Nat. Tijdschr. v. Ned. Ind. XIV. 387. pl. 7, f. 3.

Besides the specimens which agree in all respects with the description given by Wiedemann, I find in the Leyden Museum others, which differ in some minor points and therefore must be considered as mere varieties.

A male specimen from Ambarawa in Java (Ludeking) has the thorax entirely black; the stripes of the abdomen likewise are black, that of the upper side is enlarged at the hind margin of each segment, and the last segments are totally black. This is the variety mentioned by Macquart in the 3<sup>rd</sup> supplement of his "Diptères exotiques".

In another male specimen, also from Java (Müller), the black colour of the abdomen is still more extended, so that there remain only two yellow lateral stripes.

In both these varieties the legs are not darker than in normal specimens.

## 24. Eriocera albipunctata, v. d. Wulp.

Tijdschr. v. Entom. XXIII. 158. 6. pl. 10, f. 3 and 4.
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My description (l. c.) only refers to the Q. In the Leyden Museum are a few male specimens from Java (Müller and Blume), which seem to belong to this species, though in most of them the white tip on the wings is absent, so that the name, which I have given to the species, appears to be derived from an inconstant character. In the specimens referred to the abdomen is bright reddish-yellow, with the incisions and narrow lateral stripe black; the hind margin of the fifth segment is black, pointed towards the front; the sixth segment is black, on both sides with a pair of yellow spots close to each other; the last segment and the genitals are entirely black. The wings are less dark and more brownish-yellow than those of the female described; hence the white spot on their tip, if it is present, is not so distinct.

### 25. Eriocera Hilpa, Walk.

Pteroscopus Hilpa, Walk. List Dipt. Brit. Mus. I. 79. The description may be applied to a female specimen from Ningpo in China (Felder), but as this description is very short and incomplete, I here give a more ample one.

Q. Long. 17 mm. — Dull black, including the palpi and halteres; abdomen with a little lustre; the front margin of the first segments metallic or somewhat silvery. Basal joints of the antennae black; the third and following joints obscurely fulvous, with a short fuscous pilosity. Thorax covered with short hairs; ovipositor ferruginous, its long and pointed end shining. Legs piceous. Wings dark brown, the hind margin beneath the anal vein greyish; beyond the middle, but before the discal cell, is a large white spot, which is limited below by the postical vein and above is angularly bent towards the apex a little before the small cross-vein, which unites the subcostal vein with the upperbranch of the radial vein; almost above this cross-vein is a small white spot; there are also greyish spots in some of the cells; the wings have but four posterior cells.

Another specimen received from the same source, perhaps the  $\sigma$ , — but of which the abdomen is broken off, — has only the above mentioned white spot beyond the middle.

E. leucostola Walk. (Proc. Linn. Soc. Lond. I. 6. 5), from Singapore, seems to be closely related to this species but differs in having a white tip to the wings. As we have seen in the foregoing species, this character is not constant. E. leucostola may perhaps be the same species as E. Hilpa.

## 26. Eriocera ferruginosa, n. sp.

Ferruginea; capite cinereo; antennarum articulis duobus basalis, abdominisque segmentis ultimis fuscis; femorum tibiarumque apice et tarsis nigris; alarum costa flava; cellulis posterioribus quinque. — Q. Long. 21 mm.

Ferruginous. Head cinereous. Antennae thrice as long as the head, covered with short hairs, composed of six joints; the two basal ones greyish-brown; the others reddish-yellow. Palpi blackish. Thorax on the upper side with indistinct longitudinal stripes. Abdomen long and slender; the segments 1—4 with a thin black lateral stripe; the following segments and the sharply pointed ovipositor dark brown. Legs reddish-yellow; the tip of the femora and tibiae, as well as the whole of the tarsi black. Halteres yellowish with the knob blackish. Wings yellowish-grey, along the costa reddish-yellow; the crossvein, connecting the subcostal vein with the upper branch of the radial vein, is placed near the root of this branch; there are five posterior cells; the second (the furcated cell) is a little longer than its stem.

Some female specimens from Java (Kuhl).

### 27. Poecilostola pallens, n. sp.

Pallide ochracea; capite cinereo; thorace rufescente, vittis

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tribus fuscis; alis flavescentibus, crebre fusco-punctulatis. — 8. Long. 12 mm.

Head cinereous; front with a dark longitudinal line; antennae twice as long as the head; the two basal joints reddish-yellow, the flagellum blackish, composed of globular joints, gradually decreasing in extent towards the end. Thorax, scutellum and metanotum pale ferruginous: on the thorax three widely separated, fuscous stripes; the middle one slender before the suture; the outward ones broader and interrupted. Abdomen flat, pale ochraceous; the lateral suture brown; the genitals small. Legs (judging from the fragments present) and halteres ochraceous. Wings yellowish-grey; the root and costa reddish-yellow; all the cells with numerous darkgrey points, which are confluent, forming a grey stripe in the cubital cell, in the two upper basal cells and in the first posterior cell; in the costal cell these points are darker and more distinctly limited.

A of from Java (Kuhl) with the legs damaged.

This species must be closely related to Limnobia substituta Walk. (List Dipt. Brit. Mus. I. 39), which also belongs to the genus Poecilostola; it differs, however, by the distinctly separated stripes on the thorax.

# Fam. Rhyphidae.

## 28. Rhyphus maculipennis, n. sp.

Thorace flavo, vittis tribus nigris; antennis flavis, fuscoannulatis; pedibus flavis, tibiarum apice et tarsis, praeter basin, nigro-fuscis; femoribus posterioribus annulo medio et apice nigris; alis nebulosis, fusco-maculatis. — J. Long. 8 mm.

Eyes connected in front, with very small facets; front small, trigonal, cinereous; face of the same colour. Antennae yellow; the third, fourth and fifth joints with fuscous tips (the following joints broken off). Palpi

blackish. Thorax yellow, with three broad, black, longitudinal bands on the upper side, the outer ones shortened and somewhat narrower in front; pleurae with two oblique fuscous bands; scutellum brownish-red; metanotum greyishvellow, shining. Abdomen too much damaged for description. Legs reddish-yellow; the tips of the tibiae and of the two basal joints of the tarsi fuscous; the following joints of the tarsi entirely of this colour; the hind legs are longer and stouter than the others; the dark markings are more extended and black; the femora have a broad fuscous ring in the middle and a black tip; the tibiae and first joint of the tarsi are fringed on the outside with a dense pilosity. Wings shorter and broader than in our European species, clouded and with about four fuscous spots: a small quadrate one at the root of the radial vein and three larger ones at the costa, the first at the end of the auxiliar vein, a second between the end of the subcostal and radial veins, the third, which is the largest, at the apex of the wing.

A of from Ardjoeno in Java (Hekmeyer).

Although this unique specimen is somewhat damaged and therefore the description incomplete, I do not hesitate to publish it, because up to the present time no species of *Rhyphus* has been described from the Sunda Islands; moreover, this species will easily be recognized by the markings of the wings.